



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Matt Petty, CDM Smith*

Date: October 19, 2015

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on October 19, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:10 am and ending at 4:45 p.m. Weather conditions were mostly to partly cloudy all day, with temperatures ranging from 64°F in the morning to a high of 73°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with contaminated sediment removal, clean fill placement and grading, preparing for concrete placement at the boat ramp, sediment dredging and stockpiling in the Basin, and tide gate reconstruction. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:10 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and two semi-trucks sit in parking lot No. 7. Construction crews have yet to arrive.

6:20 am. The initial biological survey begins just as the construction contractor crew arrives on site. Despite localized rain over the weekend, there is no evidence of recent precipitation (e.g. saturated bank soils). However, water has recently entered the Basin from the 18" concrete stormwater pipe from Washington Boulevard near the northwest peninsula. There is some water ponded in the west and central portions of the Basin. Very little wildlife activity is observed prior to sunrise, with only the occasional western gull flyover. Wildlife activity increases around 6:45 am as dawn

approaches. One black-crowned night-heron is perched at the stormwater inlet in the northeast corner where a slow trickle flows in. Three house finches and one black phoebe fly about the east fence. One black-crowned night-heron is observed in the southeast channel, which still has water in a small, 50-foot long stretch. One Anna's hummingbird calls from the eucalyptus trees near the pump house, and two orange-crowned warblers are observed in residential landscaping near Yvonne Burke Park. Two American crows probe the south bank, and recent raccoon tracks are observed in mud near the tide gates. Two white-crowned sparrows are observed in the brush on the west bank.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew of 10 workers, including the site superintendent and subcontractors. The crews are told that little wildlife was observed during the initial survey, but that they should still be vigilant. All workers signed the sign-in sheet. Three separate double-crested cormorants fly over the Basin, and American crow and western gull flyovers increase in frequency.

7:15 am. Work begins as crews begin work on the second tide gate and the excavator stockpiles soils in the Central Basin. A bulldozer begins working in the rock pile in the northeast corner of the site. Five snowy egrets and one great egret fly southeast to northwest over the Basin. A juvenile double-crested cormorant flies over the West Basin.

7:30 am. Three trucks arrive at the northeast gate and are loaded one at a time with stockpiled Basin soils from the east bank. The excavator is moved to the east bank, and work is conducted by hand at the boat ramp to prepare for concrete placement. One great egret lands in the West Basin and forages in the deeper puddles. A European starling flies over the West Basin, as one black phoebe catches insects below. House finches and European starlings fly among the houses on the other side of Washington Boulevard.

7:50 am. The excavator moves along the east bank and delivers gravel to the boat ramp area. The main threat to wildlife is to crows that have no fear of the heavy machinery and like to probe recently disturbed soils. There are currently 20-25 American crows in the Basin, but none are disturbed by construction activities. Two song sparrows fly along the bike path, and two Anna's hummingbirds hover above the pump house.

8:15 am. One dark-eyed junco rests in trees near residences along the bike path. Two large flocks of rock pigeons are observed to the west of the site; one consists of 20 birds near the Marriott hotel and the second consists of 12 birds near the Killer Shrimp restaurant.

8:40 am. Work continues along the east bank as the excavator and bulldozer work to fill the trucks waiting in the northeast corner. One Allen's hummingbird is observed in the pine trees nearby, and one black phoebe watches the activity from a palm tree along Washington Boulevard. Gull and American crow activity has lessened.

9:00 am. The excavator is moved to the stormwater inlet area in the northeast Basin and begins stockpiling soils nearby. The loading of the third and final truck begins with soils from the east

bank. Crews also water the potted pickleweed along the Basin banks. Three mallard fly south to north over the West Basin. Two house sparrows are observed flying over the north fence.

9:40 am. The last truck leaves the site and heads to the Yuma landfill with its load of Basin soils. A dump truck arrives and delivers sand to the northeast peninsula. Large rain clouds are developing offshore to the south of the site; it's currently mostly cloudy in the Basin with no rain. One black phoebe perches on the stormwater inlet in the northeast corner of the site.

10:00 am. Crews use a small backhoe to spread sand around the northeast peninsula. The only other work in the Basin includes reconstruction at the tide gates and placing braces and a gravel foundation for future cement work at the boat ramp. One black phoebe perches on stakes along the south bank, and the occasional American crow flies over the Basin.

10:25 am. Two orange-crowned warblers and one Anna's hummingbird call from the branches of eucalyptus trees along the bike path. One black-chinned hummingbird perches atop a temporary power pole on the east bank. Several western gulls soar high above the East Basin. One monarch butterfly flies along the southeast channel before crossing Admiralty Way.

10:50 am. One of the large excavators is moved to a staging area in the northeast corner of the site. The only wildlife nearby are two black phoebes at the stormwater inlet. Work largely ends at the boat ramp; one crew member continues doing work by hand. On the northeast peninsula, fill is rolled smooth. Four American crows watch over the work from palm trees along Washington Boulevard. Where water remains in the Basin, it is shallower and more turbid than three weeks ago; therefore, it is understandable why fewer ducks and waders are being observed.

11:15 am. A Cole Equipment Rental truck arrives at the northeast gate to pick-up the large excavator. A dump truck also arrives with more sand at the northeast peninsula. Black phoebes and American crows in the area are undisturbed by all of the activity. One monarch flies over the north fence and across the Central Basin. While two monarchs and several swallowtails and checkerspots have been observed, there are noticeably fewer dragonflies and butterflies compared to three weeks ago.

11:40 am. Other than the two black phoebes at the stormwater inlet, there is no wildlife in the vicinity of the two work areas – the northeast peninsula and the tide gates. Wildlife activity has steadily decreased since 10:30 am. Two house sparrows are observed in residential yards and one mourning dove is observed on a powerline, both across Washington Boulevard. Cole Equipment Rental leaves the site with the large excavator.

12:00 pm. Construction crews and the biological monitor break for lunch.

1:00 pm. Work resumes at the tide gates and on the northeast peninsula, where regular dump truck deliveries of additional sand require spreading and smoothing. Minor spackling work takes place on the cement wall along the west bank. Occasional rock pigeon, American crow, and European starling activity is observed along Washington Boulevard. Three mourning doves perch on the west fence. One snowy egret forages in a pool created by sandbags at the northeast stormwater inlet.

1:20 pm. Winds begin picking up and rain clouds rapidly form to the east of the site. One monarch flies along the northeast fence and continues over Washington Boulevard. Three western gulls ride the winds and soar out over the Basin. Two black phoebes land in the northeast stormwater inlet.

1:45 pm. Bird flyovers have largely ceased and songbirds largely remain perched as windy conditions continue. Two black phoebes and one snowy egret remain in the northeast stormwater inlet approximately 100 feet from the northeast peninsula work area. The snowy egret uses its feet to kick up insects in the few remaining pools. One belted kingfisher circles the East Basin before perching on a pump in the Central Basin near the gabion peninsula.

2:10 pm. Sand spreading and smoothing continues on the northeast peninsula, and excess sediment removal via dump truck begins on the northwest peninsula. Winds calm some, allowing birds and butterflies to take to the air. The snowy egret flies to the southeast channel. One monarch flies from the northeast corner of the site and out over the Central Basin. A second monarch flies along the north fence.

2:40 pm. Excess sediment from the northwest peninsula is delivered to the northeast peninsula. Sediment spreading and smoothing continues on the northeast peninsula. The snowy egret flies back to the northeast stormwater inlet from the southeast channel and startles two black phoebes. There is an increase in gull activity to the south of the site.

3:00 pm. The crew at the tide gates uses a crane to extract large gate structures and equipment; no wildlife is observed in the area. Sediment removal on the northwest peninsula and sediment spreading and smoothing on the northeast peninsula continues. Throughout the day, crews have done an excellent job with dust control (i.e. continually spraying with water). The belted kingfisher leaves the site to the southwest, and three mourning doves perch on the concrete wall along the west bank. The occasional American crow, western gull, and rock pigeon flyover is observed. The snowy egret flies from the northeast stormwater inlet to the southeast channel.

3:20 pm. Crews survey the elevation of the northeast peninsula and find that is 4" shy of the desired elevation. The concrete wall crew begins clean-up and stockpile activities in Parking Lot No. 7. The tide gate crew stops work and prepares to leave for the day. Two American crows perch on a power pole overlooking the northeast peninsula, and two black phoebes continue to perch on the northeast stormwater inlet. Frequent gull activity is observed to the south of the site. In addition to western gulls, a ring-billed gull and California gull are observed.

3:45 pm. Crews continue spreading sediment from the northwest peninsula onto the northeast peninsula to reach the desired elevation. The concrete wall crew leaves the site. A ring-billed gull flies over the Basin, and a mourning dove flies along the north fence. Winds begin to pick up once again.

4:15 pm. Crews continue to smooth soils placed on the northeast peninsula. The excavator is used to stockpile sediments in the central Basin near the gabion, man-made peninsula. Frequent western gull flyovers are observed; however, no wildlife is observed near work activities.

4:30 pm. All crews finish work for the day. All crews and the biological monitor leave the site by 4:45 pm.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Five monarch butterflies were observed flying around the project site. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain. Snowy egrets were observed kicking up sediment to expose invertebrates.
4. Insects remain relatively common, including several species of dragonflies and butterflies, including monarch, swallowtails, sulphurs, and checkerspots. Observations decrease significantly when winds pick up.
5. Algal blooms are observed less frequently than in previous weeks; however, turbidity levels have significantly increased in the remaining pools resulting in a decrease in water clarity.
6. The presence of orange-crowned warblers and white-crowned sparrows indicate that early migrations have begun. As summer draws to a close, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely occurs around the periphery of the project site; very little activity is observed within the Basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on October 19, 2015.

Table 1. Bird Species Observed during Biological Monitoring on October 19, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead and exploring the Basin banks
Mallard	<i>Anas platyrhynchos</i>	3 individuals observed flying overhead
Belted Kingfisher	<i>Megaceryle alcyon</i>	1 individual perched in the Central Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	2 individuals observed at the northeast stormwater inlet and in the southeast channel
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	4 individuals observed flying overhead
Ring-billed Gull	<i>Larus delawarensis</i>	2 individuals observed flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	1 individual observed flying overhead.
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; Commonly observed sitting on power lines and flying overhead
Great Egret	<i>Ardea alba</i>	1 individual observed in the West Basin, and 1 individual observed flying overhead
Snowy Egret	<i>Egretta thula</i>	5-7 individuals observed foraging in the Basin and flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	5-7 observed foraging and perching around the east Basin and bike path
Orange-crowned Warbler	<i>Oreothlypis celata</i>	2-4 individuals observed in trees along the bike path
House Finch	<i>Haemorhous mexicanus</i>	3-6 individuals along the east fence and Washington Boulevard
Song Sparrow	<i>Melospiza melodia</i>	2-4 individuals observed along the bike path
House Sparrow	<i>Passer domesticus</i>	2-4 individuals observed along the north fence
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	2 individuals in bushes along the west bank
European Starling	<i>Sturnus vulgaris</i>	Very common; observed in palms north of site and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south of Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual observed in trees along the bike path
Anna's Hummingbird	<i>Calypte anna</i>	3-5 individuals observed in trees along the bike path
Allen's Hummingbird	<i>Selasphorus sasin</i>	1 individual observed in northeast corner pines
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	1 individual observed on a temporary power line on the east bank



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Wendy Katagi, CDM Smith
Matt Petty, CDM Smith

Date: October 20, 2015

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on October 20, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:20 am and ending at 4:00 p.m. Weather conditions were clear and sunny all day, with temperatures ranging from 63°F in the morning to a high of 79°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with sediment removal, clean fill placement and grading, concrete wall preparations, sediment dredging and stockpiling in the Basin, drilling operations, and tide gate reconstruction. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:20 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and a construction crew of three wait near the trailer.

6:30 am. The initial biological survey begins. Despite recent rains to the east, it does not appear that water levels in the Basin have increased. Very little wildlife activity is observed prior to sunrise, with only the occasional American crow or western gull flyover. Wildlife activity increases around 6:45 am as dawn approaches. One northern mockingbird is observed in a tree across Washington Boulevard, and one black phoebe is observed perched along the east bank. Two house finches are observed in trees along the bike path, and one black-crowned night heron rests along the southeast channel. Two house sparrows are observed flying along Admiralty Way, and one Anna's

hummingbird hovers above the pine trees near the tide gates. Two mourning doves perch on a temporary power line above the west bank. One great egret circles the West Basin twice before leaving the site to the east. Six rock pigeons fly around the high rises along Admiralty Way.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew, including subcontractors. The construction superintendent and Inspector of Record have yet to arrive. The crews are told that little wildlife was observed during the initial survey in the Basin itself, but that they should still be vigilant. Emphasis was also placed on protection of monarch butterflies, since several were seen the day before. All workers signed the sign-in sheet.

7:15 am. Work begins as crews continue work on the second tide gate and heavy machinery is moved to the northwest corner of the site for soil excavation and removal activities. Crews relay that eight truckloads of sediment will be removed from the west bank today. One double-crested cormorant flies from west to east over the Basin, and three western gulls perch on light poles along Admiralty Way. Extremely frequent western gull and American crow flyovers and occasional ring-billed gull flyovers are observed. One crow perches on a temporary power pole along the west bank.

7:30 am. Excavation begins along the west bank. The excavator loads a bulldozer, which transports the soils to a large truck waiting near the construction trailer. A second crew digs pits and moves soil using shovels along the north bank. Delivery of a large drill rig takes place at the northeast gate. Two American crows forage in the West Basin, roughly 75 feet from the excavator. One mourning dove flies over the West Basin, and European starling activity begins to pick-up along Washington Boulevard.

7:50 am. The drill rig is moved along the east bank to a position on the south bank; the rig kicks up dust which drifts over Admiralty Way. Two house finches are observed in palm trees along Washington Boulevard, and 6-8 American crows wander and forage throughout the Basin. Frequent rock pigeon flyovers are observed over the West Basin. A sharp-shinned hawk flies south to north over the Central Basin.

8:15 am. One black phoebe lands in the west Basin and flies from perch to perch, never closer than 50 feet to the active work areas. It will remain in the West Basin, just outside active work areas, for the entire morning. Two snowy egrets land in the southeast channel.

8:40 am. The drill rig is moved from the south bank to the West Basin. Excavation and soil removal continues in the northwest corner of the site. Very little wildlife is observed in the West Basin because little habitat/vegetation remains. A large number of crows still wander the Basin, particularly the south and east slopes and the west and central Basin. They tend to stay 50-100 feet away from work activities. The two snowy egrets leave the southeast channel and exit the Basin to the south.

9:00 am. The excavator moves into the West Basin to remove and stockpile soils to provide the drill rig a path to its desired location near the tide gates. The last truck is loaded up with west bank soils

and leaves the site for the landfill. A group of five American crows leave the site to the north, and two house sparrows hop among the bushes in Parking Lot No.7.

9:25 am. A dump truck takes sand from the staging area near the construction trailer to the northeast corner of the site. Two house finches perched on a nearby powerline fly north across Washington Boulevard. Bird flyovers decrease significantly from earlier in the morning.

9:45 am. The excavator creates a land bridge of stable soils for the drill rig to access the West Basin. The dump truck places sand along the concrete wall in the northeast corner, and crews spread and smooth it to the desired elevation. Three house finches and two European starlings perch in palms along Washington Boulevard. Two American crows perch atop a power pole in the northeast corner.

10:15 am. Other than the occasional American crow flyover, very little wildlife activity is observed in or near the active work areas. The dump truck continues to regularly deliver sand to the northeast corner of the site, where crews spread and smooth it out. The excavator begins taking rock from the gabion peninsula area to stabilize the land bridge for the drill rig. A black-chinned hummingbird flies along the south fence and over Admiralty Way, and one monarch butterfly flies south to north over the Central Basin.

10:40 am. The drill rig is placed in its desired location near the tide gates and begins drilling. One monarch butterfly is observed flying along the west bank. Two mourning doves fly along the north fence. Due to noise and activity at the tide gates, no wildlife is in the vicinity. A black phoebe perches on a temporary powerline above the west bank.

11:00 am. The excavator is used to deliver a hole casing (i.e. pipe) to the drill rig at the tide gates. The concrete wall crew installs rebar and scaffolding for the future wall in the northwest corner. Sand spreading and smoothing continues in the northeast corner. One double-crested cormorant flies over the West Basin, and one black phoebe flies over Washington Boulevard. The sunshine and lack of wind has led to an increase in butterfly activity; sulphur, painted lady, swallowtail, and monarchs are frequently observed.

11:20 am. The excavator begins removing and stockpiling soils in the West Basin. A crew dismantles and moves water supply pipes along the north bank. One black phoebe and one snowy egret are observed at the stormwater inlet in the northeast corner. Three house finches are observed in palms along Washington Boulevard, and one monarch butterfly flies over the Central Basin.

11:45 am. The tide gate crew uses a large crane to life large structures into place. The large excavator returns to a staging area in the northeast corner of the site. A second snowy egret lands at the stormwater inlet nearby. Both egrets are flushed as the excavator rolls by; one flies to the southeast channel and the other to a pool in the West Basin. One monarch is observed flying along the west bank, and one black phoebe perches on a traffic cone nearby.

12:10 pm. Construction crews and the biological monitor break for lunch. One snowy egret leaves the site to the northwest, and one monarch butterfly flies over Parking Lot No.7.

1:00 pm. Drilling resumes near the tide gates, and the large excavator removes and stockpiles soils near the stormwater inlet. Sand spreading continues in the northeast corner of the site, and trucks are lined up along Washington Boulevard to pick up soils destined for the landfill. Erecting the concrete wall scaffolding continues in the northwest corner of the site. One snowy egret and one black phoebe are observed in the stormwater inlet and are unaffected by nearby activities. One monarch butterfly flies across the Central Basin, and two western gulls land on top of the construction trailer.

1:25 pm. The excavator returns to the northwest corner to pick up a hole casing pipe and delivers it to the drill rig at the tide gates. One black phoebe and two dark-eyed juncos are observed in the southeast channel near the pump house. Occasional American crow and western gull flyovers and frequent rock pigeon flyovers are observed, particularly over the West Basin.

1:45 pm. The excavator dredges and stockpiles soils near the tide gates to assist the drilling crew. One black phoebe is perched on a temporary power line over the west bank, and three white-crowned sparrows investigate grape vines on the bank below. The majority of songbirds are observed along the bike path, which is on the opposite side of the site as most of today's work; therefore, fewer songbirds are being observed.

2:10 pm. The large excavator dredges and stockpiles soils in the Central Basin for 15 minutes before heading to the east bank to pick up sand. Minor grading of the north bank occurs using a tractor. The drilling crew completes its work for the day and leaves the site. One Anna's hummingbird is observed hovering over small bushes near the construction trailer. One monarch butterfly is observed flying in the northwest corner of the site. Occasionally, a western gull will fly over the site, and one ring-billed gull is observed flying along Admiralty Way.

2:45 pm. Crews are re-connecting water supply pipes in a new alignment along the north bank. A second crew uses a small backhoe to shape the banks around the northeast peninsula. Two black phoebes are observed perched on the stormwater inlet, and two house sparrows are observed flying along the northeast fence. One Anna's hummingbird is observed hovering over the bike path. Winds are picking up slightly and fewer butterflies and bird flyovers are being observed.

3:05 pm. The large excavator dredges and stockpiles soils along the north bank near the northwest peninsula. One snowy egret flies in and lands on the stormwater inlet structure roughly 50 feet from an active work area. It preens itself for approximately 10 minutes before flying off-site to the northwest. A group of four American crows flies along Washington Boulevard.

3:30 pm. Construction contractor crews finish work for the day and leave the site. Tide gate and concrete wall crews continue to work. One monarch flies across the Central Basin, and two western gulls fly over the West Basin and land on a rooftop along Washington Boulevard.

3:45 pm. The tide gate and concrete wall crews finish work for the day and clean-up in preparation for leaving the site.

4:00 pm. All crews and the biological monitor leave the site.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Eight monarch butterflies were observed flying around the project site. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain. Snowy egrets were observed kicking up sediment to expose invertebrates.
4. Insects remain relatively common, including several species of dragonflies and butterflies, including monarch, swallowtails, sulphurs, and painted lady. Observations decrease significantly when winds pick up.
5. Algal blooms are observed less frequently than in previous weeks; however, turbidity levels have significantly increased in the remaining pools resulting in a decrease in water clarity.
6. The presence of ring-billed gulls and white-crowned sparrows indicate that early migrations have begun. As summer draws to a close, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on October 20, 2015.

Table 1. Bird Species Observed during Biological Monitoring on October 20, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead and exploring the Basin banks
Sharp-shinned Hawk	<i>Accipiter striatus</i>	1 individual observed flying overhead
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	1 individual observed in the southeast channel
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	2 individuals observed flying overhead
Ring-billed Gull	<i>Larus delawarensis</i>	2-4 individuals observed flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; Commonly observed sitting on power lines and flying overhead
Great Egret	<i>Ardea alba</i>	1 individual observed flying overhead
Snowy Egret	<i>Egretta thula</i>	4-5 individuals observed foraging in the Basin and flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	5-7 observed foraging and perching throughout the Basin
House Finch	<i>Haemorhous mexicanus</i>	10-12 individuals along the east fence and Washington Boulevard
Northern Mockingbird	<i>Mimus polyglottos</i>	1 individual observed along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed around the periphery of the Basin
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	3 individuals in grape vines along the west bank
European Starling	<i>Sturnus vulgaris</i>	Very common; observed in palms north of site and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south of Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	2 individuals observed near the pump house
Anna's Hummingbird	<i>Calypte anna</i>	3-5 individuals observed in and around trees throughout the Basin
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	1 individual observed along the south fence



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During the daily monitoring, the biologist observed activities associated with site cleaning and maintenance, concrete wall preparations, sediment dredging and stockpiling in the Basin, drilling operations, placement of rock around the gabion peninsula, and tide gate reconstruction. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:25 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and a construction crew of eight wait near the trailer.

6:35 am. The initial biological survey begins. Very little wildlife activity is observed prior to sunrise. Wildlife activity increases around 6:45 am as dawn approaches. Freshly excavated rodent burrows are observed on the northeast and northwest peninsulas. One black phoebe is observed at the stormwater inlet, and two house sparrows are observed flying along the northeast fence. Along the bike path, two bushtits, three orange-crowned warblers, two dark-eyed juncos, and one Anna's hummingbird are observed. One black phoebe and one black-crowned night-heron are present in the southeast channel. One ruby-crowned kinglet and three house finches are observed in large

trees in Yvonne Burke Park. One American crow flyover is recorded, but no gull or rock pigeon flyovers are observed. One snowy egret flies over Parking Lot No. 7, and one mourning dove and one black phoebe rest along the west bank.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew, including subcontractors and the Inspector of Record. The construction superintendent has yet to arrive. Emphasis was placed on protection of monarch butterflies, since several were seen the day before, and egrets, ducks and American crows that could wander close to construction activities. All workers signed the sign-in sheet. This includes the drilling crew, who were given the training when they arrived later in the day yesterday, but did not sign the sheet. Western gull and American crow flyovers increase significantly after daybreak.

7:15 am. Work begins as crews continue work on the second tide gate and the concrete wall scaffolding in the northwest corner of the site. A crew also uses a small backhoe to shape the banks in the northeast corner. A peregrine falcon flies over Admiralty Way and perches on a high-rise balcony looking over the tide gates. One gadwall flies over the Basin, and one female mallard lands in a small pool at the end of the stormwater inlet and begins feeding. One black phoebe perches atop the water tanks near the construction trailer. Dawn has brought about an explosion of wildlife activity.

7:30 am. A dump truck delivers sand and gravel to the stockpiles at the northeast gate. One black phoebe perches on the stormwater inlet. Three American crows, four European starlings, and two house finches are observed in palms along Washington Boulevard.

7:50 am. Drillers prepare metal hole casings in Parking Lot No. 7, and the large excavator is moved to the northwest corner of the site. The peregrine falcon leaves its perch and flies over the Basin before exiting the site to the northwest. Nearby work causes the mallard at the stormwater inlet to fly to the southeast channel. Frequent gull flyovers are observed and several are perched on light poles and rooftops to the southwest of the site; all are western gulls.

8:10 am. The large excavator takes the metal hole casings to the drill rig in the west Basin. Rock pigeon activity picks up over the Basin and along Admiralty Way with the falcon now gone. Two mallard fly north over parking lot No. 7 and land to the northwest of the site. One Anna's hummingbird perches on a powerline to the northwest of the site.

8:35 am. The concrete wall crew begins minor work at the boat ramp. Bank shaping in the northeast corner ends and the small backhoe is moved to the south bank. One monarch flies across Admiralty Way and over the southeast channel and bike path. One Anna's hummingbird flies the opposite direction – over the southeast channel and across Admiralty Way. One black phoebe perches on a stake in the southeast channel. American crow activity is intense, with 8-10 crows exploring throughout the Basin.

9:00 am. Drilling begins near the tide gates, and the large excavator is used to dredge and stockpile soils in the West Basin. One Allen's hummingbird is observed crossing Admiralty Way and hovering around the south bank pines.

9:25 am. The dredging and stockpiling of soils in the West Basin with the large excavator stops. Work begins with the small backhoe to clear the area around the platform caissons near the tide gates for a small concrete wall. One great egret flies north to south over the Basin. The occasional western gull and rock pigeon flies over the site.

9:45 am. One juvenile western gull lands in a pool in the West Basin where it drinks and cleans itself. The large excavator begins dredging and stockpiling soils roughly 50 feet from the gull, but the gull is undisturbed. A four-person crew works along the north shoreline re-aligning water supply pipes; one black phoebe is perched on the powerline above the work area. One house finch flies over the East Basin.

10:15 am. The small excavator begins clearing the area around the platform caissons at the two south bank pines. There is very little room between the desired location for the concrete wall and the pines. The backhoe operator is told by the biological monitor to watch out for tree roots. One monarch flies over the south fence and across the Central Basin. No other wildlife is observed in the vicinity of the south bank pines.

10:25 am. The large excavator continues to dredge and stockpile soils, and is moving west-to-east into the Central Basin. Minor excavation at the south bank pines stops temporarily as an American crow lands in one pine with food, approximately 5 feet from the backhoe. The crow flies off minutes later, unharmed. One black-chinned hummingbird flies along the south fence and crosses Admiralty Way. One dark-eyed junco is observed in the pines across Admiralty Way beneath the high-rises.

10:45 am. Drilling stops at the tide gates, and the large excavator goes to the east bank to pick up sand and deliver it to the recently-drilled holes. A mixed flock of 18 rock pigeons and Eurasian collared doves lands atop a high-rise along Admiralty Way. Wildlife activity in/near the Basin has decreased noticeably.

11:10 am. The large excavator makes several trips between the tide gates and the east bank sand stockpile. During these trips, the only wildlife affected is one black phoebe at the stormwater inlet that flushes to a perch nearby when the excavator rolls by. Minor excavation at the south bank pines is completed; significant root removal is observed for the easternmost of the two pines. The crew moves on to the easternmost set of three caissons and use a tractor to place fill for the wall foundation. One monarch flies in high over the south fence and crosses the Central Basin. A second large excavator is delivered to the northeast gate.

11:40 am. The second large excavator picks up sand and drives to the West Basin. The first excavator removes the metal casing from the drilled hole near the tide gates leaving a sand-filled shaft and white, plastic riser pipe. No wildlife is observed in the nearby tide gate pines or in the adjacent West Basin. One monarch is observed flying over parking lot No.7.

12:00 pm. Most construction crews and the biological monitor break for lunch. The drilling crew continues to fill recently-dug holes with sand using large excavators.

1:00 pm. The drill rig installs a metal casing around the next hole near the tide gates, and a large excavator brings supplies (e.g. wooden pallets) to the rig. Crews continue to re-align the water supply pipe system on the north bank. Two monarchs are observed flying along the west bank, and two white-crowned sparrows are observed flying along the north fence. There is also the occasional rock pigeon flyover. Minor excavation with the small backhoe continues at the easternmost platform caissons; no wildlife is observed in the vicinity of this work.

1:25 pm. The biological monitor uses the lull in bird activity to investigate the few remaining pools. No fish are observed in any pools, but invertebrates are plentiful both on the surface and in the sediment. Pools are very turbid and most have some level of algal growth. One monarch is observed flying along the south fence. One black phoebe perches on the east fence, and one Anna's hummingbird hovers above the bike path. The casing for a third hole is set in place using a large excavator, and an American crow watches the activity from a temporary power pole on the west bank.

1:45 pm. A large excavator begins dredging and stockpiling soils in the Central Basin between the gabion peninsula and the south shoreline. One mallard is observed flying east to west and low over the Basin. One monarch flies along the south shoreline and exits the site to the southwest. A second monarch flies around the large excavator – the operator temporarily stops work after receiving visual cues from the biological monitor. The monarch is unharmed and leaves the area to the north.

2:00 pm. The wall crew finishes placing the wooden scaffolding around the first set of caissons and move to the second set at the south bank pines. Two rock pigeons fly over, otherwise, no wildlife is observed in the area. Crews finish minor excavation with the backhoe at the easternmost set of platform caissons. A group of five western gulls fly along the north fence, and two black phoebes fly back and forth between the gabion peninsula and the stormwater inlet.

2:20 pm. Soil excavation in the Central Basin stops, and the large excavator returns to staging area near the stormwater inlet. Drilling work stops for the day, and the drill crew prepare to leave the site. One snowy egret flies over the West Basin, and one monarch flies east to west down the center of the Basin.

2:45 pm. Two snowy egrets land at a pool near the end of the stormwater inlet. They investigate the area around the parked excavator. An occasional western gull flyover is observed. Unlike on previous days, all observed gulls have been western gulls. Two mourning doves fly along the west bank, and one monarch is observed flying around the construction trailer.

3:00 pm. Several crew members begin cleaning up the northwest corner in preparation for tomorrow's concrete pour. One of the snowy egrets at the southwest inlet flies to the southeast channel. Three American crows land on the west bank. One monarch is observed flying north-to-south over the Central Basin, but avoids nearby dredging activities.

3:30 pm. A bulldozer brings several loads of rock to the gabion peninsula, where the excavator spreads them to create a base for future peninsula extension. A large flock of 17 American crows are observed above Yvonne Burke Park.

4:00 pm. The tide gate crew stops work for the day and leaves the site. Work continues at the gabion peninsula where rock and geotextile mesh are placed for future peninsula extensions. The cement wall crew constructs a wooden frame around the pumps at the tide gate. Frequent American crow flyovers are observed, and three western gulls circle Parking Lot No.7. Two house finches perch on powerlines above the north bank, and two mourning doves walk along the south bank.

4:25 pm. All crews stop work for the day and begin preparing to leave the site.

4:45 pm. All crews and the biological monitor leave the site.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Twelve monarch butterflies were observed flying around the project site. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed in the remaining pools, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain. Snowy egrets were observed kicking up sediment to expose invertebrates.
4. Insects remain relatively common, including several species of dragonflies and butterflies, including monarch, swallowtails, sulphurs, and painted lady. Butterflies are attracted to the moist soils. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.
5. Algal blooms are observed less frequently than in previous weeks; however, turbidity levels have significantly increased in the remaining pools resulting in a decrease in water clarity.

6. The presence of orange-crowned warblers and white-crowned sparrows indicate that early migrations have begun. As summer draws to a close, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on October 21, 2015.

Table 1. Bird Species Observed during Biological Monitoring on October 21, 2015		
Common Name	Scientific Name	Comments
Mallard	<i>Anas platyrhynchos</i>	3-4 individuals observed foraging in the east Basin and flying overhead
Gadwall	<i>Anas strepera</i>	1 individual observed flying overhead
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead and exploring the Basin banks
Peregrine Falcon	<i>Falco peregrinus</i>	1 individual observed perched on nearby high-rise building and flying overhead
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	1 individual observed in the southeast channel
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; Commonly observed sitting on power lines and flying overhead
Great Egret	<i>Ardea alba</i>	1 individual observed flying overhead
Snowy Egret	<i>Egretta thula</i>	4-5 individuals observed foraging in the Basin and flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	5-7 observed perching throughout the Basin
House Finch	<i>Haemorhous mexicanus</i>	6-8 individuals along the east fence, Yvonne Burke Park and Washington Boulevard
Bushtit	<i>Psaltiriparus minimus</i>	2 individuals observed along the bike path
House Sparrow	<i>Passer domesticus</i>	2 individuals observed along the northeast fence

White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	2 individuals observed along the north fence
European Starling	<i>Sturnus vulgaris</i>	Very common; observed in palms north of site and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south of Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	3 individuals observed near the bike path and across Admiralty Way
Orange-crowned Warbler	<i>Oreothlypis celata</i>	3 individuals observed along the bike path
Ruby-crowned Kinglet	<i>Regulus calendula</i>	1 individual observed in Yvonne Burke Park
Anna's Hummingbird	<i>Calypte anna</i>	3-5 individuals observed in and around trees throughout the Basin
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	1 individual observed along the south fence
Allen's Hummingbird	<i>Selasphorus sasin</i>	1 individual observed near the south bank pines



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Matt Petty, CDM Smith*

Date: October 22, 2015

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on October 22, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:20 am and ending at 5:45 p.m. Weather conditions were cloudy in the morning transitioning to mostly clear and sunny in the afternoon, with temperatures ranging from 63°F in the morning to a high of 75°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with site cleaning and maintenance, concrete wall preparations, concrete placement at the boat ramp, stockpiling bank soils, drilling operations, placement of rock to extend the gabion peninsula, and tide gate reconstruction. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:20 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and a construction crew of three wait near the trailer. Additional crew wait in Parking Lot No.7.

6:30 am. The initial biological survey begins. Very little wildlife activity is observed prior to sunrise. Wildlife activity increases around 6:45 am as dawn approaches. One lesser goldfinch is observed in the pines near the tide gates, and one snowy egret flies along the south fence. Two house sparrows are observed near the pump house, and two black phoebes perch on the stormwater inlet in the

northeast corner. Along the bike path, two orange-crowned warblers and one Anna's hummingbird are observed. Three house finches fly along the northeast fence, and two white-crowned sparrows fly across the West Basin. Two European starlings and two house finches are observed in palms along Washington Boulevard. One black phoebe perches on a stake in the northwest corner. Occasional American crow and western gull flyovers are recorded, with the frequency picking up as sunrise nears.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew, including subcontractors. The construction superintendent arrives just as the training is completed. Emphasis was placed on protection of monarch butterflies, since several were seen the day before, and egrets, ducks and American crows that could wander close to construction activities. All workers signed the sign-in sheet. Six gadwall fly over Parking Lot No. 7 and land to the northwest of the site.

7:20 am. Work begins as crews continue work on the second tide gate and the concrete wall scaffolding around the platform caissons on the south bank. Soils are stockpiled on the north and east banks and will be hauled off tomorrow. The largest crew works to extend the gabion peninsula in the Central Basin to the west. This involves excavation with a large excavator and delivery of gravel and rock using a bulldozer. One black phoebe is observed in the grape vines on the west bank, and two mourning doves fly over the West Basin. Significant American crow and western gull activity is observed, with several flyovers per minute. The vast majority of observed gulls are western gulls, but two ring-billed gulls and one California gull are observed.

7:45 am. The drilling crew begins work on shafts in the West Basin. One black-crowned night-heron flies westward above Washington Boulevard and lands to the northwest of the site. Recently, wading birds and ducks have been landing at ponds in the Del Rey Colony residential complex. Several American crows and western gulls perch on light poles around the site periphery, and eight rock pigeons perch on the Killer Shrimp restaurant roof.

7:50 am. A great egret lands at the tide gates roughly 15-feet away from the drilling crew. The drilling crew stops work, and the egret is encouraged to leave the area by the biological monitor. It first perches on the tide gate itself before flying to a pool in the West Basin approximately 100-feet from the work area. A black phoebe flies from perch to perch in the West Basin, but never gets within 50-feet of active work areas.

8:15 am. One Anna's hummingbird is observed perched on the north fence. The great egret preens itself even with heavy machinery operating 100-feet away. When a worker carrying a pipe passes by on foot, the great egret flies to the southeast channel near the pump house. It stays there for a few minutes before circling the Basin and landing in the top of the largest tide gate pine. The biological monitor cautions the tide gate crew about operating the crane with the egret nearby. Extremely high levels of American crow and western gull activity continue, particularly in and around parking lot No. 7.

8:45 am. Gabion extension activities continue in the Central Basin, with a bulldozer continually bringing loads of rock from the east bank. A second bulldozer prepares a soil pile on the east bank

for future removal. The great egret leaves its perch and exits the site to the northwest. American crow and western gull flyovers are frequently observed. A northern mockingbird lands on a power pole in the northeast corner of the site.

9:10 am. Rock pigeon activity begins to increase around the high-rise buildings to the south of the site. A group of house finches fly from palm to palm along Washington Boulevard. Two black phoebes fly between the stormwater inlet and soil piles in the central Basin. Two mallards fly east over the Basin.

9:35 am. The drilling crew successfully installs a standpipe riser in the second shaft. A large excavator heads to the east bank to pick up the first of several loads of sand to fill the shaft. Soil stockpiling continues around the southeast channel near the pump house; a bulldozer consolidates several piles into one. Two European starlings fly along the north fence, and two dark-eyed juncos forage in the southeast channel undisturbed by stockpiling activities nearby. American crow and western gull flyovers continue but not as frequently as earlier in the day.

10:00 am. A flock of nine American crows circles above Yvonne Burke Park, and two Anna's hummingbirds chase after one another near the bike path. One snowy egret perches on the stormwater inlet structure and preens itself.

10:20 am. The snowy egret at the stormwater inlet begins foraging for invertebrates in a nearby pool. A second egret flies in and joins the first; both are undisturbed by the heavy machinery that routinely passes within 30-feet to pick up sand and rock from the east bank. The biological monitor stands on the nearby northeast peninsula and alerts operators of the egrets' presence. One worker walks by the pool on foot, which causes the egrets to fly to the southeast channel. Two black phoebes remain at the stormwater inlet. Dump trucks deliver more sand and gravel to the staging area near the construction trailer. A cement truck arrives at Parking Lot No.7, and stockpiling activities stop around the southeast channel.

10:40 am. The wall crew finishes preparing the platform caissons for today's cement pour. Two black phoebes perch along the east bank, and two mourning doves perch on powerlines above the north bank. One snowy egret flies back to the stormwater inlet, while the other remains in the southeast channel. One double-crested cormorant flies over the site.

10:55 am. Traffic control measures are initiated along Admiralty Way for the pending cement work. A semipalmated plover flies over the Basin from east to west. One Anna's hummingbird hovers near trees on the other side of Admiralty Way, and one monarch flies high over the West Basin and crosses Admiralty Way.

11:15 am. Crews survey and excavate the Central Basin to continue constructing the gabion peninsula westward. The drilling crew has installed a metal casing in the third hole. One black-chinned hummingbird is observed flying near the tide gate pines, and northern flicker flies over the East Basin. Two mourning doves land on powerlines overlooking the north shore.

11:35 am. The cement truck moves into place along Admiralty Way near the boat ramp. The wall crew takes lunch. Wildlife activity has decreased noticeably, and consists of several black phoebes, two snowy egrets, and the occasional American crow or western gull flyover.

12:10 pm. Most construction crews and the biological monitor break for lunch. The drilling crew continues to fill recently-dug holes with sand using a large excavator. The wall crew work to prepare for the cement pour near the boat ramp. One monarch is observed flying along the north fence. One snowy egret leaves the southeast channel and exits the site to the north.

1:00 pm. Work resumes extending the gabion peninsula in the Central Basin and reconstructing the tide gates. Drilling continues in the West Basin, and a crew waits on concrete to arrive near the boat ramp. Three monarchs are observed in the northeast corner of the site, where they are attracted to flowering plants in nearby private yards. Two black phoebes perch on the stormwater inlet, and the occasional American crow or western gull fly over the site.

1:25 pm. In preparation of the concrete pour at the boat ramp, the biological monitor surveys the area. One ruby-crowned kinglet and two American crows are observed in trees along the bike path. Two orange-crowned warblers are observed in eucalyptus trees near the pump house. No wildlife is observed in the southeast channel or near the boat ramp. While waiting on concrete, crews resume moving stockpiled soils at the boat ramp to a pile on the east bank.

1:50 pm. The concrete mixer arrives at the boat ramp and the concrete pour begins. One monarch flies across the southeast channel and over Admiralty Way. One Anna's hummingbird, two house finches, and one American crow are observed in trees where the bike path meets Yvonne Burke Park.

2:00 pm. The extension of the gabion peninsula continues; it is now twice as long as when work started this morning. A snowy egret resting inside the stormwater inlet is flushed into the East Basin when the biological monitor walks by. It eventually flies to the southeast channel near the pump house. One monarch is observed flying along the south bank, and one house sparrow flies over the East Basin.

2:20 pm. The cement mixer leaves the site. The work at the boat ramp will take at least two more truckloads, but cement mixers are delayed. The snowy egret leaves the southeast channel and returns to the stormwater inlet, where it perches atop the surrounding chain-link fence before hopping down into the culvert itself. A second snowy egret lands at the stormwater inlet. Two black phoebes fly perch-to-perch in the East Basin.

2:45 pm. One monarch butterfly and one black phoebe are observed in the southeast channel. The occasional western gull flies over the Basin. Soils continue to be moved from the boat ramp area while crews wait on cement. Dump trucks make several deliveries of rock and sand to the staging area near the construction trailer. One snowy egret from the stormwater inlet flies to a pool in the Central Basin near the pumps and gabion extension work. Fewer butterflies are observed today, but a greater species diversity is present.

3:00 pm. Crews working on the peninsula extension need to dump rock roughly 20 feet from the pool where the snowy egret is foraging. The biological monitor coaxes the egret away from the area, and it flies to the stormwater inlet. The drilling crew installs a metal casing in the fourth shaft in the West Basin.

3:20 pm. The drilling crew and tide gate crew finish work for the day and prepare to leave the site. The second cement mixer arrives at the boat ramp. Four house finches are observed on temporary power lines over the west bank.

3:40 pm. Work continues in two locations: the gabion peninsula in the Central Basin and the cement pour at the boat ramp. One ring-billed gull flies over the site, and American crows fly over periodically. One black phoebe is observed in the southeast channel.

4:00 pm. The third cement mixer has arrived, and the second mixer leaves the site. Minor soils removal continues around the boat ramp, and soils are deposited on the east bank pile. One monarch flies over the southeast channel, otherwise no wildlife is observed in the vicinity of the boat ramp work.

4:25 pm. The construction contractor crew completes work and prepares to leave for the day. American crow and western gull flyovers are observed fairly frequently. Two white-crowned sparrows are observed in the tide gate pine trees, and one mourning dove flies along the north fence.

4:45 pm. Cement work continues at the boat ramp. Only the concrete wall crew, site superintendent and biological monitor remain on site. One monarch butterfly is observed flying along the south fence. Bird activity is increasing throughout the Basin, but birds avoid the active construction area. Only a few house finches, one black phoebe, and American crows are observed near the pump house.

5:15 pm. The cement crew finishes work for the day and heads to the construction trailer area to clean and put away equipment. Several American crows and European starlings watch the clean-up activities from nearby fences and light poles.

5:45 pm. All construction crews and the biological monitor leave the site for the day.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Ten monarch butterflies were observed flying around the project site. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed in the remaining pools, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain. Snowy egrets were observed kicking up sediment to expose invertebrates.
4. Insects remain relatively common, including several species of dragonflies and butterflies, including monarch, swallowtails, sulphurs, red admiral, checkerspot, and painted lady. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.
5. Algal blooms are observed less frequently than in previous weeks; however, turbidity levels have significantly increased in the remaining pools resulting in a decrease in water clarity.
6. The presence of orange-crowned warblers and white-crowned sparrows indicate that early migrations have begun. As summer draws to a close, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

Table 1 provides a list of bird species observed during biological monitoring on October 22, 2015.

Table 1. Bird Species Observed during Biological Monitoring on October 22, 2015		
Common Name	Scientific Name	Comments
Gadwall	<i>Anas strepera</i>	6 individuals observed flying overhead
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead and exploring the Basin banks
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	1 individual observed flying overhead
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	1 individual observed flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Ring-billed Gull	<i>Larus delawarensis</i>	3 individuals observed flying overhead

California Gull	<i>Larus californicus</i>	1 individual observed flying overhead
Mourning Dove	<i>Zenaida macroura</i>	Several individuals; Commonly observed sitting on power lines and flying overhead
Great Egret	<i>Ardea alba</i>	1 individual observed resting in the Basin
Snowy Egret	<i>Egretta thula</i>	4-5 individuals observed foraging in the Basin and flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	5-7 observed perching throughout the Basin
House Finch	<i>Haemorhous mexicanus</i>	10-15 individuals observed throughout the Basin; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	1 individual observed in a pine near the tide gates
House Sparrow	<i>Passer domesticus</i>	2-3 individuals observed near the east Basin
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	4 individuals observed in the west Basin
European Starling	<i>Sturnus vulgaris</i>	Very common; observed in palms north of site and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south of Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	2 individuals observed in the southeast channel
Orange-crowned Warbler	<i>Oreothlypis celata</i>	2-4 individuals observed along the bike path
Ruby-crowned Kinglet	<i>Regulus calendula</i>	1 individual observed along the bike path
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed in and around trees throughout the Basin
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	1 individual observed near the tide gate pine trees
Northern Mockingbird	<i>Mimus polyglottos</i>	1 individual observed in the northeast corner of the site
Northern Flicker	<i>Colaptes auratus</i>	1 individual observed flying along the north fence
Semipalmated Plover	<i>Charadrius semipalmatus</i>	1 individual observed flying low and fast over the Basin



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Sunny Lee, SWCA Environmental Consultants*

Date: October 23, 2015

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on October 23, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Sunny Lee, SWCA biologist, beginning at 6:15 am and ending at 5:45p.m. Weather conditions during the day were partly cloudy, with temperatures ranging from 57°F in the morning to a high of 77°F. No measurable rain was recorded.

During the daily monitoring, the biologist observed activities associated with installing the tidal gate, dredging soil from the Basin, exporting contaminated soil, grading, drilling de-watering wells, building a rock cage foundation, and building forms for the boat ramp. All crews were overseen by the LA County Building Inspector and the Stormwater Pollution Inspector.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site.

6:40 am. Initial Biological Assessment begins. No wildlife are observed within the project area.

6:50 am. The biological monitor gave the bio-awareness training to four crews totaling 23 workers from C.S. Legacy, CMB, Griffin Construction, and Spiess Construction.

7:00 am. Trainings and safety tailboards were completed. Six dump trucks arrived and staged along Washington Boulevard.

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7:10 am. A large excavator was delivered to the layout yard. Three Western Gulls were observed flying overhead.

7:20 am. C.S. Legacy crew loaded rocks into rock cages for the foundation inside the Basin while a front loader traveled to and from the rock piles on the northeastern side of the Basin to deliver rocks and gravel throughout the day. An excavator was used to dredge the Basin near the rock cage foundation. Speiss construction continued to install the second tidal gate. CMB worked on building forms for the boat ramp on the east end of the Basin. Two American Crows were observed flying overhead.

7:30 am. The first of the six dump trucks moved into place to receive contaminated dirt for export. A large front loader traveled to and from the dirt pile to load soil into the dump trucks throughout the day. One American Crow was observed flying overhead.

7:35 am. One Western Gull and one American Crow were observed flying overhead.

7:45 am. Two Western Gulls and two American Crows were observed flying overhead.

8:05 am. The first dump truck moved offsite. Two Western Gulls and one American Crow were observed flying overhead.

8:10 am. The Griffin crew began to drill one of two de-watering wells today using an excavator and a drill rig near the western side of the Basin. The second of the six dump trucks mobilized into place to receive contaminated dirt for export. One Black Phoebe was observed feeding on the western bank of the Basin.

8:30 am. The second dump truck moved offsite. The third of the six dump trucks mobilized into place to receive contaminated dirt for export. One Western Gull was observed flying overhead.

8:45 am. The third dump truck moved offsite. One Common Raven was observed walking around in the layout yard while two American Crows were observed flying overhead.

8:55 am. The fourth of the six dump trucks mobilized into place to receive contaminated dirt for export.

9:05 am. One American Crow was observed perched on a power line adjacent to trailer office and then moved to the northern bank of the Basin. Five Rock Pigeons were observed flying overhead.

9:15 am. A fourth dump truck moved offsite. The fifth of the six dump trucks mobilized into place to receive contaminated soil for export. The Griffin crew finished drilling the first de-watering well.

9:50 am. The fifth dump truck moved offsite. CMB crew continued to work on building forms for the boat ramp. The last of the dump trucks mobilized into place to receive contaminated soil for export.

10:15 am. The sixth dump truck moved offsite.

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10:30 am. The excavator that was used for dredging moved to the western side of the Basin, and began to create a pathway for the Griffin crew to access a bore site adjacent to the tidal gates.

10:40 am. Small front loader was delivered to the layout yard. Four American Crows and one Belted Kingfisher were observed flying overhead. One Monarch Butterfly was observed flying along the western bank of the Basin.

10:45 am. Two dump trucks with gravel and rocks were staged along Washington Boulevard.

11:05 am. Three more dump trucks with gravel and rocks were staged along Washington Boulevard. One Monarch Butterfly was observed flying by the grapevines adjacent to the water filter tanks.

11:15 am. One more dump truck with gravel and rocks was staged along Washington Boulevard.

11:25 am. Two more dump trucks with gravel and rocks were staged along Washington Boulevard.

11:30 am. Griffin crew moved equipment to the second bore site adjacent to the tidal gates. The dump trucks began unloading the materials. Two rock pigeons were observed flying overhead.

11:35 am. Two more dump trucks with gravel and rocks were staged along Washington Boulevard.

12:00 pm. Crews broke for lunch. One Black Phoebe was observed feeding along the south bank of the Basin.

12:05 pm. Three American Crows and one Western Gull were observed flying overhead.

12:30 pm. Crews returned to work. One American Crow was observed flying overhead.

12:50 pm. Two American Crows were observed flying overhead.

1:00 pm. C.S. Legacy crew began to use the small excavator to grade the northern bank of the Basin. One American Crow was observed flying overhead.

1:15 pm. One Western Gull was observed flying overhead.

1:20 pm. Two American Crows and five Rock Pigeons were observed flying overhead.

1:50 pm. The C.S. Legacy crew continued to build a rock cage foundation in the center of the Basin while grading was being conducted on the northern bank of the Basin.

2:00 pm. One Snowy Egret landed on the inlet fence along the northern bank but flew off shortly after.

2:30 pm. One American Crow and one Rock Pigeon were observed flying overhead.

2:45 pm. One Monarch Butterfly was observed flying along the western side of the Basin and into the parking lot.

2:50 pm. One last dump truck delivered rocks and gravel. Four American Crows and one Western Gull were observed flying overhead.

3:10 pm. One of the large excavators moved to the north bank and began to grade. One American Crow was observed flying overhead.

3:20 pm. The Griffin crew completed the second de-watering well and left for the day.

3:45 pm. One Snowy Egret was observed flying overhead. One American Crow was observed foraging along the east bank of the Basin.

3:50 pm. Four American Crows were observed foraging along the east bank of the Basin.

3:55 pm. One Snowy Egret landed in the Basin near the western side but flew off shortly after.

4:00 pm. The front loader began to move dirt from the grading activity along the northern bank to the northwest corner.

4:20 pm. One American Crow and one Western Gull were observed flying overhead.

5:30 pm. The crews finished for the day.

5:45 pm. Crews cleaned up and left.

Additional Observations

No Black Skimmers, Belted Kingfisher, Least Terns, or Ospreys were observed today.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife has avoided foraging inside Basin entirely, due to soil dredging and drilling de-watering wells.
2. Wildlife levels were low throughout the day.

Table 1 provides a list of bird species observed during biological monitoring on October 23, 2015.

Table 1. Bird Species Observed during Biological Monitoring on October 23, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	33 individuals observed foraging on northeast bank, very common; observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	2 individual observed foraging on the western bank
Common Raven	<i>Corvus corax</i>	1 individual observed walking around in the layout yard
Belted Kingfisher	<i>Megasceryle alcyon</i>	1 individual observed flying overhead
Snowy Egret	<i>Egretta thula</i>	3 individual observed landing in stormwater inlet, foraging on the western bank
Western Gull	<i>Larus occidentalis</i>	Very common; observed flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead



Figure 1. Photo facing northeast of Griffin Construction drilling a de-watering well.



Figure 2. Photo facing northeast of C.S. Legacy crew exporting contaminated dirt.



Figure 3. Photo facing northwest of CMB crew building forms for the boat ramp.



Figure 4. Photo facing north of C.S. Legacy crew building rock cage foundation and dredging.



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Wendy Katagi, CDM Smith
Sunny Lee, SWCA Environmental Consultants

Date: October 24, 2015

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on October 24, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Sunny Lee, SWCA biologist, beginning at 6:15 am and ending at 3:30p.m. Weather conditions during the day were partly cloudy, with temperatures ranging from 60°F in the morning to a high of 82°F. No measurable rain was recorded.

During the daily monitoring, the biologist observed activities associated with installing the tidal gate, dredging soil from the Basin, grading, building a rock cage foundation, and building forms for the boat ramp. All crews were overseen by the LA County Building Inspector and the Stormwater Pollution Inspector.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:20 am. Biological monitor arrives on site.

6:40 am. Crews arrives at the layout yard.

6:50 am. Biologist administered biological training to two crews totaling 17 workers from C.S. Legacy and CMB. Four Western Gulls were observed flying overhead.

7:15 am. A mini excavator was delivered to the layout yard. C.S. Legacy crew continued to building the rock cage foundation in the Basin as well as grading the north bank. CMB continued to build the forms for the boat ramp at the eastern end of the Basin.

7:30 am. Crew began filling and compacting sand along the outer concrete wall on the west side of the Basin.

7:45 am. A small front loader was hauled offsite on a trailer. One American Crow was observed flying overhead.

7:50 am. One Western Gull was observed flying overhead while one American Crow was observed perched on the fence on the north side of the Basin then moved to the utility line adjacent to the trailer office.

8:00 am. C.S. Legacy crew continued to grade along the north bank with the front loader and excavator. One American Crow landed in the center of the Basin.

8:20 am. One Great Egret was observed flying overhead. Two American Crows were observed landing along the west bank, and five American Crows were observed foraging along the south bank of the Basin.

8:30 am. Two American Crows were observed flying overhead.

8:50 am. One American Crow was observed perched on the utility wire adjacent to the trailer office.

9:15 am. One American Crow was observed landing along the west bank of the Basin.

9:30 am. Two Western Gulls were observed flying overhead.

9:40 am. One Black Phoebe was observed feeding near the tidal gates.

9:55 am. Two American Crows were observed flying overhead.

10:10 am. One Monarch Butterfly was observed flying near the tidal gates.

10:20 am. Three American Crows were observed flying overhead while a Common Raven was observed walking around the layout yard. Another Common Raven was observed hiding food among dirt clumps along the north side of the Basin. One Monarch Butterfly was observed flying near the grape vines adjacent to the water filter tanks.

10:50 am. C.S. Legacy crew continued to grade along the north bank and compact dirt along the western cement wall. Two American Crows were observed perched on the utility line on the north side of the Basin.

11:10 am. One Western Gull was observed flying overhead. Another Common Raven was observed hiding food among dirt clumps along the south bank.

11:25 am. Two American Crows were observed flying overhead.

11:45 am. One Monarch Butterfly was observed flying near the tidal gates.

12:05 pm. One Monarch Butterfly was observed flying near the grapevines in the western portion of the Basin.

12:10 pm. The crew moved one of the excavators to the northwest corner and then broke for lunch.

12:25 pm. One Western Gull was observed flying overhead.

1:00 pm. The crew returned to work.

1:10 pm. The crew used the excavator in the northwest corner to lift and lower a compacting machine over the western side of the basin along the concrete wall.

1:30 pm. One American Crow was observed flying overhead.

1:45 pm. The crew moved piles of sand from the layout yard to the northwest corner using the large front loader. Two Monarch Butterflies were observed flying the west bank. One Western Gull was observed flying overhead.

1:50 pm. One Western Gull was observed flying overhead.

1:55 pm. One Great Egret was observed landing in small pool of water near the west side of the Basin. There was construction activity was 150 feet from the bird. It did not seem to be disturbed the work.

2:10 pm. The Great Egret flew away after a quick bath.

2:30 pm. The excavator used for grading on the north bank moved to grade at the northwest corner.

2:50 pm. One Western Gull was observed flying overhead.

3:15 pm. The crews finished for the day.

3:30 pm. The crews cleaned up and left the yard.

Additional Observations

No Black Skimmers, Belted Kingfisher, Least Terns, or Ospreys were observed today.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife has avoided foraging

inside Basin entirely, due to soil dredging.

2. Wildlife levels were low throughout the day.

Table 1 provides a list of bird species observed during biological monitoring on October 24, 2015.

Table 1. Bird Species Observed during Biological Monitoring on October 24, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	28 individuals observed foraging on northeast bank, very common; observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1 individual observed foraging
Common Raven	<i>Corvus corax</i>	3 individual observed walking around in the layout yard, hiding food within the Basin
Great Egret	<i>Ardea Alba</i>	2 individual observed flying overhead, and landing in the Basin
Western Gull	<i>Larus occidentalis</i>	Very common; observed flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead



Figure 1. Photo facing south of C.S. Legacy compacting sand along the western concrete wall.



Figure 2. Photo facing west of C.S. Legacy crew grading along the north bank.



Figure 3. Photo facing northeast of C.S. Legacy crew lifting and lowering the compacting machine over water pipes along the western cement wall.



Figure 4. Photo facing northeast of C.S. Legacy crew building rock cage foundation and dredging with a Great Egret in the foreground.